

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/010700

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 C07K16/28 A61K39/395 C12N15/13 C12N5/18 G01N33/50 A61P31/04		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ, Sequence Search		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/36488 A (LEIV EIRIKSSON NYFOTEK AS; DZIEGLEWSKA, HANNA; ESPEVIK, TERJE; SUNDAN,) 25 May 2001 (2001-05-25) cited in the application abstract page 7, line 4 - page 8, line 9 page 9, lines 1-6 page 49, lines 2-9	1, 2, 4, 5, 8-29
Y	----- abstract page 7, line 4 - page 8, line 9 page 9, lines 1-6 page 49, lines 2-9	3, 6, 7, 30
X	WO 03/070761 A (YEDA RESEARCH AND DEVELOPMENT CO. LTD; COHEN, IRUN, R; LIDER, OFER; NU) 28 August 2003 (2003-08-28) abstract page 9, lines 1-3 page 28, lines 1-32 ----- -/--	1, 2, 4, 5
<div style="display: flex; justify-content: space-between;"> <span><input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.</span> <span><input checked="" type="checkbox"/> Patent family members are listed in annex</span> </div>		
<div style="display: flex;"> <div style="flex: 1;"> <p>* Special categories of cited documents</p> <p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="flex: 1;"> <p>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>*X* document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>*Y* document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>*&amp;* document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search  <div style="text-align: center; font-weight: bold;">15 February 2005</div>		Date of mailing of the international search report  <div style="text-align: center; font-weight: bold;">07/03/2005</div>
Name and mailing address of the ISA European Patent Office, P B 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx 31 651 epo nl, Fax (+31-70) 340-3016		Authorized officer  <div style="text-align: center; font-weight: bold;">Montrone, M</div>

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>BRIGHTBILL HANS D ET AL: "Host defense mechanisms triggered by microbial lipoproteins through toll-like receptors" SCIENCE (WASHINGTON D C), vol. 285, no. 5428, 30 July 1999 (1999-07-30), pages 732-736, XP002317651 ISSN: 0036-8075 cited in the application abstract page 734, column 1, paragraph 1 - column 2, paragraph 1</p>	31
X	<p>ALIPRANTIS A O ET AL: "CELL ACTIVATION AND APOPTOSIS BY BACTERIAL LIPOPROTEINS THROUGH TOLL-LIKE RECEPTOR-2" SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,, US, vol. 285, no. 5428, 30 July 1999 (1999-07-30), pages 736-739, XP000985942 ISSN: 0036-8075 abstract page 737, column 1, paragraph 1 page 738, column 3, paragraph 17</p>	31
X	<p>UEHORI JUNJI ET AL: "Simultaneous blocking of human Toll-Like receptors 2 and 4 suppresses myeloid dendritic cell activation induced by Mycobacterium bovis bacillus Calmette-Guerin peptidoglycan." INFECTION AND IMMUNITY, vol. 71, no. 8, August 2003 (2003-08), pages 4238-4249, XP002317652 ISSN: 0019-9567 abstract page 4239, column 2, paragraph 1-5 page 4241; table 2 page 4245, column 1, paragraph 2 - column 2, paragraph 2 page 4248, column 2, paragraph 1</p>	1,2,4,5, 18-23,31
X	<p>SANDOR FRANTISEK ET AL: "Importance of extra- and intracellular domains of TLR1 and TLR2 in NFkappaB signaling." JOURNAL OF CELL BIOLOGY, vol. 162, no. 6, 15 September 2003 (2003-09-15), pages 1099-1110, XP002317653 ISSN: 0021-9525 abstract page 1100, column 1, paragraph 1 - page 1101, column 1, paragraph 1; figure 1 page 1107, column 1, paragraph 3</p>	1,2,4,5, 31
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	MATSUGUCHI TETSUYA ET AL: "Gene expressions of lipopolysaccharide receptors, toll-like receptors 2 and 4, are differently regulated in mouse T lymphocytes" BLOOD, vol. 95, no. 4, 15 February 2000 (2000-02-15), pages 1378-1385, XP002317654 ISSN: 0006-4971 abstract page 1380, column 1, paragraph 4; figure 1 page 1383, column 1, paragraph 2 -----	3,6,7,30
P,X	MENG GUANGXUN ET AL: "Antagonistic antibody prevents toll-like receptor 2-driven lethal shock-like syndromes." THE JOURNAL OF CLINICAL INVESTIGATION. MAY 2004, vol. 113, no. 10, May 2004 (2004-05), pages 1473-1481, XP002317655 ISSN: 0021-9738 abstract -----	1-31

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### Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 23-30(a) partially  
because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 23-30 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; It is covered by claims Nos.:

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/010700

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0136488	A	25-05-2001	AU 1404701 A	30-05-2001
			EP 1232184 A1	21-08-2002
			WO 0136488 A1	25-05-2001
			NO 20022280 A	08-07-2002
WO 03070761	A	28-08-2003	AU 2003209623 A1	09-09-2003
			WO 03070761 A1	28-08-2003